

Review of: "Exploring the Autoimmune Hypothesis of Type 1 Diabetes: Investigating the Potential Role of Peritoneal Membrane Defects in the Pancreatic Tail and Revisiting Alternative Theories of Disease Etiology"

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Potential competing interests: No potential competing interests to declare.

The manuscript presents a novel hypothesis by suggesting that peritoneal membrane defects in the pancreatic tail could play a role in the pathogenesis of T1DM. This adds a fresh perspective to the ongoing debate about the etiology of T1DM and challenges the widely accepted autoimmune hypothesis.

Comments:

-AI & Plagiarism Report: This should be checked.

-Abstract: Clearly, the mentioned highlights the primary investigation.

-Introduction: #The literature review is comprehensive but could include more recent studies that discuss the autoimmune hypothesis.

-Methodology: The methods section provides detailed information.

- Anatomical and Physiological Characteristics of the Pancreas with a Focus on the Tail Region: # Good one. # Figures: Permission required from the original source.

-Potential Causes of Interperitoneal Membrane Dysfunction in the Pancreatic Tail: Biological Mechanisms and Genetic Influences: Required visual aids, such as diagrams illustrating the proposed mechanism, would be helpful for readers. # Citation required for particularly those affecting the gastrointestinal tract, such as Crohn's disease.

-Mechanisms of Peritoneal Repair and Beta-Cell Regeneration Induced by GLP-1 Agonists in Type 1 Diabetes: It would be better to have some schematic diagrams.

-Discussions: #Some sections, particularly the discussion on alternative theories, are dense and could be simplified for better readability. # A discussion on how this new perspective could influence current treatment strategies or lead to new therapeutic approaches would be valuable. # The discussion could be expanded to consider the broader implications of the findings for the treatment and prevention of T1D. This would provide a more comprehensive conclusion to the manuscript.

-Conclusions: The authors should consider revising the manuscript to delineate the relationship between the various

theories discussed more clearly and to ensure that all claims are adequately supported by evidence & future scope of research.

-References: A few references are outdated. Updating these with more recent studies would improve the manuscript's relevance.

Request to cite the updated citations:

Sarkar, S., Sadhu, S., Roy, R., Tarafdar, S., Mukherjee, N., Sil, M., Goswami, A., & Madhu, N.R. (2023). *Contemporary Drifts in Diabetes Management. Int. J. App. Pharm.*, 15(2), 1-9. <https://doi.org/10.22159/ijap.2023v15i2.46792>

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